CLAIMS:

1. A method of processing a broadcast data stream that contains a stream of encrypted data and a stream of messages, data in successive segments of the stream of encrypted data being decryptable with successive decryption information from the messages, the method comprising
- storing the stream of encrypted data;
- storing items with decryption information for the encrypted data independently retrievable from the stream;
- storing synchronization information linking respective points in the stored stream of encrypted data to respective ones of the items with decryption information;
- replaying a stored part of the stream of encrypted data;
- retrieving the items with decryption information for the points in said stored part during said replaying;
- combining the retrieved items with decryption information with the stream during replay at times selected under control of the synchronization information.

2. A method according to Claim 1, wherein during replay the stream is fed to a decoder and the decryption information is combined with the stream by feeding the decryption information to a secure device, which in response to the decryption information feeds control words to the decoder.

3. A method according to Claim 1, comprising the steps of
- storing the items with decryption information each in association with a respective time stamp value;
- maintaining a progressive time value counter during replay of the stream; and
- combining each particular retrieved item with the stream in response to detection that the time stamp counter reaches the time stamp value associated with the particular retrieved item.

4. A method according to Claim 3, comprising
- maintaining a further progressive time value counter during reception of the stream;

- sampling values from said further time value counter each time when a respective one of the messages is detected during reception;
- storing decryption information from said message in the items with decryption information;
- storing the sampled value sample for each respective one of the messages as said time stamp value associated with the item that contains decryption information from said message.

5. A method according to claim 3, wherein the encrypted data contains time counting information used for controlling progress of the time value counter.

6. A method according to Claim 1 comprising
- detecting respective ones of the messages detected during reception of the stream;
- assigning different sequence numbers to the detected messages;
- storing information representing the sequence numbers among the encrypted data at locations where the messages to which the sequence numbers have been assigned occurred in the stream during reception;
- storing each sequence number in association with a respective one of the items with decryption information that contains encryption information from the message to which the sequence number is assigned;
- using the sequence numbers stored among the stream to retrieve and time the items associated with the sequence numbers.

7. A method according to Claim 6, wherein the messages are stored at their original locations among the encrypted data, the sequence numbers being inserted in the messages during storage, the decryption information from the items associated with the sequence numbers inserted in the items being used when the messages are encountered during replay.

8. A conditional access apparatus for processing a broadcast data stream that contains a stream of encrypted data and a stream of messages, data in successive segments of the stream of encrypted data being decryptable with successive decryption information from the messages, the apparatus comprising
- storage means, the apparatus being arranged to store the stream of encrypted data in the storage means, as well as storing items with decryption information for the encrypted data independently retrievable from the stream, and storing synchronization information linking

respective points in the stored stream of encrypted data to respective ones of the items with decryption information;

- a replay unit for replaying a stored part of the stream of encrypted data;
- a retrieval unit arranged to retrieve the items with decryption information for the points in said stored part from the storage means, and to feed said items to the replay unit during said replaying;
- a secure device, arranged to generate control words under control of the decryption information and to feed the control words to the replay unit to decrypt the items;
- a synchronization unit arranged to combine the retrieved items with decryption information with the stream during replay at times selected under control of the synchronization information by feeding the decryption information to the secure device at the selected times, for generating the control words.

9. A conditional access apparatus according to Claim 8, comprising
- means for generating time stamp information, the storage means storing the items with decryption information each in association with a respective time stamp value;
- a progressive time value counter that is active during replay of the stream;
- the synchronization unit combining each particular retrieved item with the stream in response to detection that the time stamp counter reaches the time stamp value associated with the particular retrieved item.

10. A conditional access apparatus according to Claim 9, comprising
- a further progressive time value counter active during reception of the stream;
- a sampling unit for sampling values from said further time value counter each time when a respective one of the messages is detected during reception;
- the storage means storing decryption information from said message in the items with decryption information and storing the sampled value sample for each respective one of the messages as said time stamp value associated with the item that contains decryption information from said message.

11. A conditional access apparatus according to Claim 8 comprising
- a detection unit for detecting respective ones of the messages during reception of the stream and assigning different sequence numbers to the detected messages;

- the storage means storing information representing the sequence numbers among the encrypted data at locations where the messages to which the sequence numbers have been assigned occurred in the stream during reception; and storing each sequence number in association with a respective one of the items with decryption information that contains encryption information from the message to which the sequence number is assigned;
- the synchronization unit using the sequence numbers stored among the stream to retrieve and time the items associated with the sequence numbers.

12. A conditional access apparatus according to Claim 6, wherein the messages are stored at their original locations among the encrypted data, the sequence numbers being inserted in the messages during storage, the decryption information from the items associated with the sequence numbers inserted in the items being used when the messages are encountered during replay.